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| Cambridge Raspberry Jam | |
| Name |  |
| Age |  |
| Parent |  |

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| Beginners worksheet #2 | |
| Project | Simple LED with python |
| Description | In this project you will learn how to turn and LED on and off. |

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| Tools required | | | |
| □ Raspberry Pi + SD card | | □ Breadboard |  |
| □ Keyboard |  | □ 1 X Red LED |  |
| □ Monitor + HDMI cable | | □ 1 X Blue LED |  |
| □ Power supply |  | □ 2 x 330 Ω resistors |  |
|  |  | □ 3 x m/f jumper wires | |

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| C:\Users\matthew.manning\Desktop\LEDs_bb.png |

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| Code |
| TURN ON THE LEDS “2\_on.py”  #!/usr/bin/python  import RPi.GPIO as GPIO  GPIO.setmode(GPIO.BCM)  GPIO.cleanup()  GPIO.setwarnings(False)  GPIO.setup(17,GPIO.OUT)  GPIO.setup(27,GPIO.OUT)  print "Lights on"  GPIO.output(17,GPIO.HIGH)  GPIO.output(27,GPIO.HIGH)  TURN OFF THE LEDS “2\_off.py”  #!/usr/bin/python  import RPi.GPIO as GPIO  GPIO.setmode(GPIO.BCM)  GPIO.cleanup()  GPIO.setwarnings(False)  GPIO.setup(17,GPIO.OUT)  GPIO.setup(27,GPIO.OUT)  print "Lights on"  GPIO.output(17,GPIO.LOW)  GPIO.output(27,GPIO.LOW) |
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| 1. Create file “touch 2\_on.py”  2. Create file “touch 2\_off.py”  3. Enter the code above code  Once complete “Ctrl + x” then “y” then “enter”  4. To run the python code “sudo python 2\_on.py” << Watch LEDS turn on  5. To run the python code “sudo python 2\_off.py” << Watch LEDS turn off |